



UNITED STATES PATENT AND TRADEMARK OFFICE

cel

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,167	10/09/2003	Yasuaki Fukada	1248-0674P	6469

2292 7590 12/02/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

NGUYEN, ANTHONY H

ART UNIT	PAPER NUMBER
----------	--------------

2854

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/681,167	FUKADA ET AL.	
	Examiner	Art Unit	
	Anthony H. Nguyen	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

In view of the Decision from Pre-Appeal Brief Review on September 19, 2005,
PROSECUTION IS HEREBY REOPENED.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Noguchi et al. (US 4,978,980) in view of Yasui et al. (US 5,839,032).

With respect to claims 1,3, 5 and 17, Noguchi et al. teaches a two-side image forming apparatus having a first transferring path 508 for transferring one-side printed sheet to a tray 507 from a supply tray or a sheet storage section 501 and a second transferring path or a duplex path 509 connected to the first transferring path for feeding the one-side printed sheet to an imaging forming means 505 so that the plurality of sheets are transferred concurrently in the transferring paths, an intermediate roller 515 and a sensor (d) in the second path 609 provided along the second transferring path and a register or resister roller 405 (Noguchi et al., Figs. 21, 22 and 29). Noguchi et al. et al. does not clearly teach the intermediate roller which is synchronism with a resumption of rotation of the resist roller. Yasui et al. teaches the intermediate roller 91

Art Unit: 2854

or 93 provided with the second sheet-transferring path 92 for synchronizing with the rotation of the resist rollers 34a,34b. In view of the teaching of Yasui et al., it would have been obvious to one of ordinary skill in the art to modify the two-side image forming apparatus of Noguchi et al. by providing the intermediate roller as taught by Yasui et al. for optimizing the print quality on two sides of a sheet. With respect to claim 2, Noguchi et al. teaches the switchback means 516 located upstream of the tray 507 (Noguchi et al., Fig.21).

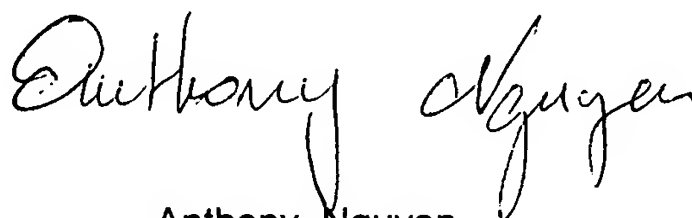
With respect to claim 4, Noguchi et al. teaches all that is claimed, except the rollers located at the crossing point between the first and second transferring paths. Yasui et al. teaches a two-side image forming apparatus having the resist roller 34a or 34b located at the crossing point between the first conveying path 33 and the second conveying path or the duplex path 92 (Yasui et al., Fig.3). Therefore, in view of the teaching of Yasui et al., it would have been obvious to one of ordinary skill in the art to modify the image forming apparatus of Noguchi et al. by providing the rollers located at the crossing point between the two conveying paths as taught by Yasui et al. to improve the efficiency of transferring sheets in the two-side image forming apparatus.

With respect to claims 6-16, the selection of a desired period or timing for feeding a sheet from a tray or to an image forming device while the switchback means reverses the other sheet to a second path, and the selection of a desired location of the detection means on the transferring paths would be obvious through routine experimentation in order to get the maximum number of printed sheets in a shortest time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Nguyen whose telephone number is (571) 272-2169. The examiner can normally be reached daily from 9 AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld, can be reached on (571) 272-2168. The fax phone number for this Group is (571) 273-8300.



Anthony Nguyen
11/28/05
Patent Examiner
Technology Center 2800